The mid-term will cover the following materials.

1. Lecture notes:
2. proximate and ultimate causes
3. learned and innate behavior
4. sexual selection
5. mating system
6. parental care
7. Textbook:
8. Chapter 3. Proximate and ultimate causes

(pp. 74-75: definition of proximate and ultimate causes)

1. Chapter 4. Animal learning

(pp. 121-123: what is individual learning?)

(pp. 124-127: sensitization, habituation, and classical conditioning)

(pp. 130-131; operant conditioning)

(pp. 138-139: evolutionary adaptation of learning)

1. Chapter 6. Sexual selection

(pp. 190: definition of sexual, intersexual and intra-sexual selection)

(pp. 193-206: evolutionary models of mate choice)

(pp. 215-221: male-male competition)

1. Chapter 7. Mating system

(pp. 228: definition of different mating system)

(pp. 229-231: monogamy: proximate and ultimate causes)

(pp. 232-232; 241-243: polygamy)

(pp. 238-239: promiscuous mating system)

(pp. 245-246: extra-pair copulation, paternity)

(pp. 248-249: sperm competition)

1. Chapter 3. Parental care

(pp. 105-106: an example of experience-related parental care)

1. Reading assignments (make sure you understand the main point of each article)
2. Tools using in New Caledonian crows
3. FoxP2 gene and speech learning
4. MHC genes and female choice
5. Vasopressin and mating system
6. Maternal care and epigenetics

The test will include (1) multiple choices; (2) short answers; (3) short essays.